“The country is full”: Are outgroups ostracized when they are perceived as burdensome?

Research Thesis

Presented in partial fulfillment of the requirements for graduation

with research distinction in Psychology in the undergraduate

colleges of The Ohio State University

by

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Abstract

Individuals protect their group by ostracizing (excluding and ignoring) burdensome group members, those who keep a group from achieving its goals. In intragroup interactions (within a single group), burdensome members cause individuals psychological pain (pain closely associated with physical pain) which prompts the ostracism of the burdensome group member. Many social interactions occur at an intergroup (between group) level though, leading to the question of whether ostracizing a burdensome group member in an intragroup context may translate to an intergroup experience. To test this question, I utilized a minimal groups paradigm to establish group membership through an estimation task (i.e., Over-vs. Under-estimators). Participants then read about an outgroup that was described as burdensome or beneficial (Outgroup Description) before imagining an interaction with either an ingroup or outgroup (Evaluation Group) and answered questions assessing participants’ psychological pain, temptations to ostracize the group, how participants’ pain influenced their temptations to ostracize the group, and negative affect. Results indicate that reading about a burdensome group produced more negative responses than reading about a non-burdensome group (Fs (1, 502) ≥ 6.09, ps ≤ .014; except negative affect (F(1, 502) = 0.20, p = .656). The results pattern also indicates a significant Outgroup Description and Evaluation Group interaction, for all outcomes (Fs (1, 502) ≥ 35.12, ps < .001). Reading about a burdensome outgroup and then interacting with that outgroup was significantly worse than interacting with an outgroup that was described as beneficial or interacting with an ingroup at either level of burden. I conducted another study, using realistic culture groups, instead of minimal groups, which also found a link between burden and ostracism, but with limitations. Collectively these studies establish the link between burden and ostracism, previously researched at the intragroup level, also functions at an

intergroup level. Further, certain groups, if portrayed as burdensome, may be vulnerable to being labeled out of society (i.e., ostracized) by another group.

Introduction

In 2015, 63% of Republicans said immigrants were a burden “because they take jobs, housing and health care” (Sarlin, 2015). The Trump presidency, with immigration policy taking center stage of its programs, promoted a similar line of thinking by declaring that “Illegal immigration hurts American workers; burdens American taxpayers; and undermines public safety” in 2018 (White House). Just a year later, President Trump declared the country “full” and no longer able to take in more immigrants (Miller & Lemire, 2019). The Trump administration seemed to make a connection between perceiving a group to be burdensome to the country and used that burden to promote exclusion of that group. I ask if there truly is a connection between perception of groups as burdensome and exclusion of those groups.

Research on ostracism (being excluded and ignored) demonstrates individuals exclude burdensome others. When a group member becomes a burden to the group, individuals are more likely to ostracize the burdensome group member (those who are poor social exchange partners or keep the group from obtaining its goals) compared to a non-burdensome group member (Kurzban & Leary, 2001; Wesselmann, Wirth, Pryor, Reeder, & Williams, 2013, 2015). This connection between burdensomeness and ostracism has thus far only been studied in intragroup (within-groups) scenarios. By looking at this burden-ostracism connection at the intergroup level (between groups), as I will do in this study, we can investigate if burdensome social groups are ostracized similar to burdensome group members.

Ostracism

Ostracism is a common, painful occurrence in both the human (Nezlek, Wesselmann, Wheeler, & Williams, 2012) and animal worlds (Gruter & Masters, 1986). When ostracized, people feel psychological pain (Williams, 2009); fMRI data found that this pain activates similar

brain regions associated with physical pain in the brain’s dorsal anterior cingulate cortex and ventral pre-frontal cortex right (Eisenberger, Lierberman, & Williams, 2003; Onoda et al., 2010). Ostracism further lowers an individual’s relational evaluation (degree to which their relationship is valuable, important, or close; Leary, 1999; Wirth, Sacco, Hugenberg, & Williams, 2010). Low relational evaluations can lead to low self-esteem and more negative feelings (Buckley, Winkel, & Leary, 2004). These adverse effects are linearly associated with the amount of ostracism one faces as well; the more an individual is ostracized, the more distressed they are (Williams, Bernieri, Faulkner, Gada-Jain, & Grahe, 2000). Further, ostracism threatens four fundamental psychological needs that are necessary for an individual to function successfully: belonging, control, self-esteem, and meaningful existence (Williams, Cheung & Choi, 2000; Williams, 2009). These aversive effects lend credence to ostracism’s description as “social death” (Williams, 2007).

Ostracism not only affects the individual who is ostracized, but, through antisocial and aggressive behavior, it affects everyone around them as well. Individuals who are ostracized gave less desirable foods to those who ostracized them (Chow, Tiedens, & Govan, 2008) and even punished innocent bystanders, who did not ostracize them, by giving them more hot sauce knowing they disliked spicy foods (Warburton, Williams, & Cairns, 2006). Research demonstrating the ostracism-aggression connection was strengthen by Twenge et al. (2001), who found that participants would issue more negative job evaluations to those who excluded them and blast them with higher levels of aversive noise. This last behavior was also issued to neutral persons who had no interaction with the participant. In a more extreme sense, a case study of 15 school shootings between 1995 and 2001 found that all but two of them involved acute or

chronic rejection in the form of ostracism, bullying, and/or romantic rejection (Leary, Kowalski, Smith, & Phillips, 2003).

When do Individuals Ostracize?

Because of the pain and distress ostracism causes, it is a powerful social tool. Ostracism can punish free loaders (Fehr & Gächter, 2002) and those displaying offensive behavior (Gooley, Zadro, Williams, Svetieva, & Gonsalkorale, 2015). In both prior research studies, individuals acted for the betterment of the group by excluding members who hindered or challenged the norms of the group. For example, participants are more likely to ostracize individuals they deem disagreeable (Hales, Kassner, Williams, & Graziano, 2016) or possess specific, unfavorable personality traits such as low agreeableness and conscientiousness (Rudert, Keller, Hales, Walker, & Greifeneder, 2020). Using ostracism, these individuals decided who was acceptable to be included in the group. Of particular interest to this study, participants will also use ostracism to punish burdensome individuals (Wesselmann, Wirth, Pryor, Reeder, & Williams, 2013, 2015).

Participants will use ostracism as a punishment tool on those who are deemed burdensome. Burdensome others are defined as being poor social exchange partners; their cost outweigh their benefits (adapted from Kurzban & Leary, 2001). One of the ways researchers manipulated burdensomeness is through a virtual ball tossing game, Cyberball (Williams et al., 2000). By manipulating the speed at which the virtual confederate players return ball tosses, Wesselmann et al. (2013) found that participants rated the slower throwers as more burdensome, allocated fewer tosses to that player (ostracism), and wished to avoid them in the future. These findings were replicated in Wirth, LeRoy, & Bernstein, (2019) using ATIMIA, a word creation game where players must work together to win. Players that gave more wrong answers were rated as more burdensome, and these burdensome interactions caused participants more

psychological pain, a stronger likelihood to ostracize the burdensome members, and the psychological pain they felt influenced how they ostracized the burdensome member. Further, when participants were asked to imagine Facebook friends that were burdensome to their Facebook experience (e.g., obsessive and opinionated posting, unwanted tagging in post), participants self-reported more pain, more negative affect, and a greater likelihood to exclude that Facebook friend (Okdie & Wirth, 2018). Participants will also ostracize individuals who are burdensome even if they cannot help it (Wesselmann, Williams, & Wirth, 2014). While all the previously mentioned studies provide an understanding of the uses and effects of ostracism, the research has only investigated ostracism at the intragroup level — interactions within a group. However, because social groups are so numerous and varied, interactions between groups may not always be positive and ostracizing a group may be a way of regulating aversive intergroup behavior.

Ostracism at the Intergroup Level

Individuals can have strong attachments to their social groups and readily defend the group from threat. An individual’s connection to a social group is achieved when he or she begins to self-identify as a member of a group; the individual self-categorizes (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) or identifies (McCall & Simmons, 1966) as a member of the group. Once this identity has been achieved, the individual gains a sense of who they are as a part of their identification with that group (Tajfel & Turner, 1979, 1986). Further, they begin to ascribe more positive characteristics to their group (Brewer, 1979) and tend to assume attributes about their group are correct (Abrams, Thomas, & Hogg, 1990). Individuals may also derive positive self-esteem from their identification with their group (Oakes & Turner, 1980), but the

research on this has not been entirely conclusive (Hogg & Turner, 1985). Less controversial, however, is the research on how individuals will protect their group.

This effort to maintain a positive group image continues in the face of negative group information. For example, students who identified strongly with their university responded to threatening information about their university more critically than nonthreatening information compared to students without a strong identification (Dietz-Uhler, 1999). Further, medical student volunteers considered negative feedback about their group less reliable and important than positive feedback (Cadinu & Cerchioni, 2001). These medical student volunteers also began to compensate for negative information in one domain (in this case professionality) by overcompensating in another domain (such as personality). These findings were also dependent on the strength of the identity with the group, with strong identifiers becoming more defensive compared to low identifiers. This defensive posture continues in the face of group threats, such as showing more commitment to the group (Ellemers, Spears, & Doosje, 1997), strengthening their degree of identification with the group (Ethier & Deaux, 1994), and rating the group more positively than outgroups (ingroup bias; Henderson-King, Henderson-King, Zhermer, Posokhova, & Chiker, 1997). Individuals work to maintain positive group images to better reflect on themselves.

Perceptions of threat from an outgroup often led to negative intergroup interactions and even conflict. Whether competing for resources (Sherif, 1966; see Jackson, 1993 for review), or reconciling cultural, ideological, or moral differences (Zárate, Garcia, Garza, & Hitlan, 2004), threats and competition between groups is widespread and well documented. Oftentimes, these conflicts can lead to prejudice and discrimination between the groups. The finding that perceived threat leads to an increase in prejudice (Makashvili, Vardanashvili, & Javakhishvili, 2018) is a

well-established concept in social psychology (for review, see Riek, Mania, & Gaertner, 2006). For example, perceived threat from immigrants caused European participants to be more prejudiced towards those immigrants (Pereira, Vala, & Costa-Lopes, 2010). A similar study found that ingroup norms of anti-discriminatory behavior weakened this effect, but only when perceptions of threat were low, not high (Falomir-Pichastor, Muñoz-Rojas, Invernizzi, & Mugny, 2004). In Israel, perception of economic threat from foreign immigrants affected Israeli Jewish worker’s willingness to endorse economic discrimination against those immigrants by suggesting they deserve lower wages than Jews (Semyonov, Raijman, & Yom-Tov, 2002). In fact, Israelis with high perceptions of threat were more likely to support actions considered human rights violations against these immigrants (Maoz & McCauley, 2008). In sum, threat to the ingroup is met with greater attachment to the ingroup, negative outgroup feelings, and harmful actions (e.g., prejudice, discrimination, violence) towards the outgroup.

It seems plausible that ostracism may be an effective tool for handling outgroups that are threatening, in this case, burdensome. This possibility is supported by previous research demonstrating protection of ingroups from threat and previous studies showing ostracism as a negative, yet effective means of protecting the group from burdensome members at the intragroup level. Given burden’s similarities to other forms of intergroup threat, it seems reasonable to believe that individuals would respond negatively to burdensome outgroups. If this is true, and outgroups can be perceived to be burdensome, then burdensome outgroups may be ostracized.

Current Research

In this thesis, I investigated if past research on burdensome intragroup (within a group) members can be used to understand ostracism of groups in intergroup (between groups)

interactions. Using previous research on burdensome group members (Okdie & Wirth, 2018), I created fake articles designed to manipulate burden (burdensome vs. beneficial) from a fictional outgroup (i.e., Abirians) to see if these descriptions cause participants psychological pain leading to an enhanced temptation to ostracize that group. After being presented with articles about the burdensome or beneficial outgroup, Abirians, American participants imagined interactions with three separate groups: Americans, Abirians, and Galians. Americans were evaluated as a group to assess how the perception of burden affects ingroup evaluations. I used another fictional group (Galians), for a control condition to determine if negative or positive descriptions of one outgroup affect perception of other outgroups.

Study 2 was designed to both replicate the results from Study 1 and expand on our understanding of burden in an intergroup context. Besides replicating the results with different circumstances than Study 1 and to enhance generalizability, Study 2 works to better understand the underlying mechanisms that cause perceptions of burden to lead to ostracism using minimal groups. Instead of reading about outgroup as a foreign culture, I assigned participants into minimal groups and presented them with burden from an opposing outgroup. Minimal groups are arbitrary groups with no connection to real-life identities which participants are assigned to for research purposes (Tajfel, 1970). Replicating the results from Study 1 with minimal groups would show the effect is not dependent on the idiosyncrasies of individual cultural groups (as in Study 1) and is instead driven by basic psychological functions that govern our intergroup relations (i.e., pain and negative affect).

Study 1

Hypothesis

I hypothesize that describing the Abirians as burdensome will cause participants more psychological pain, temptations to ostracize, and motivation to ostracize due to pain than when Abirians are described as beneficial. I also hypothesize that the Americans will cause less psychological pain, temptations to ostracize, and motivation to ostracize due to pain compared to the other two groups (Abirians & Galians). Meanwhile, when Abirians are described as burdensome, they will be rated as causing participants greater psychological pain, temptations to ostracize, and motivation to ostracize due to pain compared to Americans and Galians. Further, I predict that the Galians will be rated as causing participants more psychological pain, temptation to ostracize, and motivation to ostracize due to pain compared to the Americans.

In contrast, I hypothesize when Abirians are described as beneficial to the United States, this will lead to less differences in participants’ ratings of psychological pain, their temptations to ostracize, or their motivation to ostracize due to pain during their interactions between the three Evaluation Groups.

Method

Participants and design

I recruited 147 introduction to psychology students from The Ohio State University at Newark using an online sign-up tool (i.e., SONA). Sixty-two participants were included in the final analysis (58.1% males; 70.97% white; M_{age} = 18.47, SD_{age} = 1.24). Most of the participants removed from the final analysis were due to negative responses in the participant quality questions, which asked if they were distracted, interrupted, or if they would like to have their data excluded (56 participants removed in this manner; removal criteria for the study was

preregistered: https://osf.io/pdjb8/). Additionally, nine participants were removed due to having written responses that were not related to the prompt and one was removed for taking too long to complete the study (i.e., > 3 *SD* from the average).

Participants were randomly assigned to a 2 (Outgroup Description: burdensome vs. beneficial) × 3 (Evaluation Groups: Americans vs. Abirians vs. Galians) mixed-design. The Outgroup Description was a between-participants factor as each participant read one description of the Abirians. Evaluation Groups was a within-participants factor as participants completed the dependent variables for each Evaluation Group separately, and the order in which participants completed these groups was randomized.

Procedure

After providing consent, participants read a fictitious news summary detailing population changes in the U.S. caused by a fabricated culture group called Abirians. The Abirians were presented as a foreign group arriving in the United States in increasing numbers and were described as either burdensome or beneficial for the nation.

To manipulate the burdensomeness of a cultural group, the Abirians were described as either a drain on the economic resources of Americans (burdensome) or a boon to the economic resources (beneficial). The burdensome/beneficial distinction is based on past research investigating burdensome group members (Okdie & Wirth, 2018). These summaries about the Abirians were identical except for a few key words that created the distinction between burdensome and beneficial (respectively; bolded in the following examples). The fictitious news summary indicated “Abirians will **take/create** many jobs in the country. This has led to **lower/higher** wages for American workers” and “states with a larger Abirian population have **higher/lower** taxes on average, leading to a **smaller/larger** tax refund each year for their

citizens and **more/less** budget deficits.” After reading these summaries, participants completed manipulation checks to ensure a sense of burden was created by the news summaries.

Participants then imagined three separate interactions with the Evaluation Groups: Abirians, Americans, and Galians. Imagined interactions are used in ostracism research previously to gauge participants’ reactions to a specified interaction (e.g., Giesen & Echterhoff, 2018). Participants were asked to visualize an interaction with 4-5 individuals of the designated group and spend 2-3 minutes describing the interaction in writing. While writing, participants were asked to answer questions such as “What does the group look like,” “How is the group behaving,” and “How do they relate to you.” After participants completed this imagined interaction and described their experience, participants completed the dependent variables based on the imagined interaction. Participants completed this process three times, once for each of the Evaluation Groups in a random order. After the assessment of all three groups, participants reported their demographics and were debriefed.

Measures

Manipulation Checks. To ensure the news summary created a perception of burden, based on the assigned condition, participants completed several manipulation check items. Participants responded to the items “The Abirians will be a burden to Americans,” “The Abirians would keep Americans from achieving their goals,” and “Abirians will contribute to America’s success” (reversed-scored) using a 1 (*Not at all*) to 7 (*Very true*) scale ($\alpha = .81$).

Psychological Pain. To assess participants’ levels of psychological pain, I adapted measures used in previous studies to assess psychological pain (Wirth, et al., 2019). This includes the Numerical Rating Scale (NRS-11; Riva, Wirth, & Williams, 2011), where participants rated the pain they felt from their imagined interaction with the Evaluation Group

(i.e., Abirians, Americans, Galians) on a 0 (*No pain sensation*) to 10 (*Most intense pain sensation*) scale. Participants also completed the Pain Faces Scale (Wong & Baker, 1988), a single item pain measure utilizing six round drawn faces ranging from a positive, smiling face to a negative, crying face. Participants were asked to "choose the face that best describes [their] pain when interacting with the Americans/Abirians/Galians." Each face represents a point value on a 0-10 scale (0 = *no hurt*, 2 = *hurts a little*, 4 = *hurts little more*, 6 = *hurts even more*, 8 = *hurts whole lot*, 10 = *hurts worse*).

Exclusionary Assessment. To test participants' temptation to ostracize others, I modified the Exclusionary Cues scale developed by Wirth et al., (2019) by changing the focus of the scale from evaluations of a single person to evaluations of a group of people. Further, some items which were not applicable to evaluations of a group of people were removed from the scale. Participants were asked to imagine interacting with each group (Americans, Abirians, and Galians) and rate how tempted they would be to exhibit each inclusionary/exclusionary behavior towards the group, such as "Tell others they are not like us," "Ignore them if they asked you a question," "Refuse to work together with them," "Treat them nicely," (reverse-scored), and "Let them borrow some of your money," (reverse-scored). Participants answered the 10-item measure on a 1 (*Not at all tempted*) to 9 (*Very tempted*) scale. Items were scored with higher values indicating more temptations to use exclusionary behavior ($\alpha s \geq .88$).

Pain as a motivator to ostracize. Participants also rated the degree to which pain played a factor in their temptation to ostracize the group they imagined an interaction with. This two-item measure, a modified version of one used by Wirth et al., (2019), asked participants to rate their level of agreement with the statements "The motivation for my behavior temptations towards the Americans/Abirians/Galians was based on them being "such a pain." and "The

motivation for my behavior temptations towards the Americans/Abirians/Galians was because they were making me feel stressed." Participants answered these items on a 1 (*Not at all*) to 7 (*Very much so*) scale with higher values indicating more motivation due to pain ($\alpha s \geq .80$).

Data Analysis and Results

I ran a mixed-ANOVA using Outgroup Description (i.e., burdensome vs. beneficial) as a between-participants factor and Evaluation Groups (i.e., Abirians, Americans, Galians) as a within-participants factor. To interpret any significant interactions, I also ran post-hoc analysis (i.e., Tukey) comparing the three groups (Americans vs. Abirians vs. Galians) at each level of burden (burdensome vs. beneficial).

Manipulation checks. Results indicate the manipulation was successful and that descriptions of the Abirians caused participants to view them as burdensome. When the Abirians were describe as a drain on the economy, participants rated them as more burdensome ($M = 3.37$; $SD = 1.63$) compared to when they were described as beneficial ($M = 1.71$, $SD = 0.89$; $t(60) = -4.96$, $p < .001$; $d = 1.26$).

Psychological pain. Participants did not experience more psychological pain ($F(1, 60) = 2.20$, $p = .143$) whether they read the burdensome or beneficial group description. Further, there was no main effect of psychological pain between the three Evaluation Groups ($F(2, 60) = 0.97$, $p = .383$). There was also no significant interaction between Outgroup Description and Evaluation Group ($F(2, 60) = 1.74$, $p = .171$). These analyses are based on the Numerical Rating Scale, and results from the Pain Face Scale were not included because it is a duplicate measure.

Exclusionary Assessment. Reading about burdensome ($M = 2.82$, $SD = 1.09$) versus non-burdensome ($M = 2.27$, $SD = 0.85$) Abirians led to significantly more exclusionary behaviors ($F(1, 60) = 4.78$, $p = .033$). However, there were no significant effects when investigating a main

effect of Evaluation Groups ($F(2, 60) = 0.29$, $p = .752$) nor the interaction between Outgroup Description and Evaluation Groups ($F(2, 60) = 0.36$, $p = .698$).

Pain as a motivator to ostracize. Finally, there were no significant differences in pain as a motivator to ostracize based on either Outgroup Description ($F(1, 60) = 1.37$, $p = .247$) or Evaluation Groups ($F(2, 60) = 0.18$, $p = .839$). There was also no significant interaction between these Independent Variables ($F(2, 60) = 0.29$, $p = .751$).

Study 1 Discussion

In Study 1, I presented American participants with a fictional outgroup that was either burdensome or beneficial to the United States. Participants then imagined interactions with three Evaluation Groups, Americans, Abirians, and Galians, and completed measures assessing psychological pain, temptations to ostracize, and pain as a motivator to ostracize for each group. Except for successful manipulation checks and a main effect of temptations to ostracize at the different levels of burden (burden v. beneficial) there were no significant differences found in the analysis.

While I did not find significant differences in the variables, this research does add to the literature in important ways, particularly for intergroup interactions. Because the manipulation checks were successful, it seems that people can perceive social groups as burdensome when they are described as negatively impacting the ingroup. To my knowledge, this is the first-time perceptions of burden have been tested at the intergroup level. Since I created these news articles, this method may possibly be a valuable manipulation for future research looking at intergroup interactions. Further, there was a significant main effect on ostracism as a result of the burdensome description of the outgroup, showing some link between perceptions of burden and ostracism at the intergroup level.

Study 1 did accomplish part of what I set out for it. However, I expected to find significant differences between both levels of burden as well as between all three Evaluation Groups for each of the dependent variables, which did not happen. Study 1 was created as an attempt to test the burden-ostracism link in a relevant manner to current events, using American identity as an ingroup while presenting migrating foreigners as burdensome. If this had worked, it would have supplemented Study 2 and provided relevant examples of it working “in the real world.” However, the participant quality for the Study was not very good. This is indicated by the large dropout rate of participants from quality measures (nearly 40%), and participants may not have developed a meaningful connection during the interaction for it to successfully induce psychological pain as predicted. Study 2 is an attempt to investigate many of the missing pieces to Study 1, with higher quality participants as well.

Study 2

Hypothesis

I hypothesize when the initial Outgroup Description depicts a burdensome, versus a beneficial group, participants will express more psychological pain, have increased temptations to ostracize, attribute pain as their motivator to ostracize at a higher rate, and report greater negative affect. Further, I hypothesize that interactions with the outgroup will cause greater psychological pain, temptations to ostracize, motivation to ostracize due to pain, and negative affect compared to interactions with the ingroup. I also hypothesize when participants read about a burdensome outgroup and then imagine an interaction with that outgroup they will experience more psychological pain, have increased temptations to ostracize, attribute pain as their motivator to ostracize at a higher rate, and report greater negative affect compared to all other

conditions (reading about a burdensome outgroup and interacting with an ingroup or reading about a beneficial outgroup and interacting with either an ingroup or outgroup).

Method

Participants and Design

Participants in Study 2 were recruited using Amazon Mechanical Turk (Mturk), an online platform for recruiting participants (see Buhrmester, Kwang, & Gosling, 2016 for review of using Mturk to recruit psychology participants). To be eligible for the study, participants were required to not have completed any previous study ran by the lab, have a HIT approval rate between 95 - 100%, have between 100 – 5000 HITs approved, and be a resident of the United States. If eligible, participants self-selected their participation in the study. I recruited 600 participants and 506 were used in the final analysis (68% female; 73.9% white; M_{age} = 37.96, SD_{age} = 12.80, range = 19 to 77). Participants were removed from the study if they provided descriptions of the imagined interaction that were off-topic, reported being interrupted or distracted, indicated they did not think their data should be used, fell outside of 3 standard deviations of the average time to complete the study, incorrectly responded to which minimal group they were assigned, or expressed suspicion that the group assignment or demographic information in the Human Resources summary were falsified. (removal criteria for the study was preregistered: https://osf.io/q26rh/).

Participants were randomly assigned to a 2 (Outgroup Description: burdensome vs. beneficial) × 2 (Evaluation Group: out-group vs. ingroup) between-participant design.

Procedure

After providing consent, participants started the study by being assigned to a minimal group using the minimal groups paradigm (Tajfel, 1970). To employ the minimal group

paradigm, participants completed the Dots Estimation Task (Tajfel, Billig, Bundy, & Flament, 1971), which is a common method for randomly assigning participants to the minimal groups (e.g., Isbell & Tyler, 2003). The Dots Estimation Task is administered by showing participants screens with large number of dots (beginning around 20 and increase up to around 100) and asking them to guess how many dots are present. These screens are only visible for 1 second, preventing participants from actually counting the dots and, subsequently, leaving the accurate answer ambiguous. After each screen, participants provided their estimate on the number of dots. After providing estimates of dots on 10 of these screens, participants were randomly assigned one of two groups based on the supposed “accuracy” of their predictions: Overestimators or Underestimators. In reality, these group assignments were completely arbitrary as participants were randomly assigned in one of these groups regardless of their predictions.

After being assigned an identity, participants read a fabricated summary of Human Resource analyses detailing worker characteristic changes in U.S. businesses. Instead of Abirians, however, these summaries discussed these changes and following effects from the *opposite minimal group* that participants were placed in from the Dots Estimation Task. For instance, if participants were categorized as Underestimators, the summary discusses increases in the Overestimator population, and vice-versa. Participants always read an analysis about an outgroup.

Based on the manipulation in Study 1, the outgroup was described in the analysis as either a burden to business in the U.S. (burdensome condition) or beneficial to business in the U.S. (beneficial condition). The summary, with the burden wording examples coming first, said things such as “An increase in Under/Overestimators means you will receive **lower/higher**

wages,” and “Increasing Under/Overestimators leads to **increased/decreased** company layoffs – **increasing/decreasing** the likelihood you will be fired.”

After reading the summary of the outgroup affecting U.S. businesses, participants were asked to visualize an interaction with 4-5 individuals of a group of either Underestimators or Overestimators. The group that participants were asked to imagine an interaction with was randomly assigned, meaning participants could be asked to evaluate the same (ingroup) or opposite (outgroup) minimal group they were assigned after the Dots Estimation Task. Participants were then asked to spend 2-3 minutes describing the interaction in writing. While writing, participants were asked to answer questions such as “What does the group look like,” “How is the group behaving,” and “How do they relate to you.” Participants were also asked to spend 1-2 minutes describing the emotions they felt during their interaction with the group. Participants then completed the dependent variables and were debriefed.

Measures

Manipulation Checks. Participants completed manipulation checks to ensure the summaries create a sense of burden. Based on what group they read about, participant responded to the items “The Under/Overestimators will be a burden to American businesses,” “The Under/Overestimators would keep American businesses from achieving their goals,” and “Under/Overestimators will contribute to American businesses’ success” (reversed-scored), using a 1 (*Not at all*) to 7 (*Very true*) scale. Higher values indicate a greater sense of burden (α = .92). Participants were also asked to identify which minimal group they were assigned to after the Dots Estimation Test.

Repeated measures from Study 2. Participants completed similar measures as Study 1, with only the group names being changed, including psychological pain, exclusionary assessment (α =.92), and pain as a motivator to ostracize (α =.84).

Positive and Negative Affect. Finally, participants completed the Positive and Negative Affect Schedule (PANAS) used by Watson, Clark, & Tellegen (1988). The PANAS is a common device for measuring participants’ affective states (e.g., Tuccitto, Giacobbi, & Leite, 2010). This measure was included in Study 2 to investigate other possible reactions participants have to burdensome groups. The 20-item scale consist of 10 items assessing positive affect (e.g., Enthusiastic, Inspired, Excited) and 10 items assessing negative affect (e.g., Upset, Nervous, Guilty). Participants were asked to what extent they felt each of these items during their imagined interaction on a 1 (*Not at all*) to 5 (*Very much so*) scale. These items were scored so that higher values indicate more negative affect (i.e., positive affect items were reversed-scored; α = .94).

Data Analysis and Results

I ran a 2 (Outgroup Description: burdensome vs. beneficial) × 2 (Evaluation Group: outgroup vs. ingroup) ANOVA with both Outgroup Descriptions and Evaluation Group as between-participant factors. Further, to analyze the interaction between the variables (Outgroup Description & Evaluation Group) I ran a one-way ANOVA between the four conditions at each level of the variables (burdensome description/outgroup interaction; burdensome description/ingroup interaction; beneficial description/outgroup interaction; or beneficial description/ingroup interaction). I then reported the post-hoc Tukey results which correct for multiple comparisons.

Manipulation Checks. Results indicate the manipulation was successful, as describing the outgroup negatively impacting U.S. businesses caused more perceptions of burden (M = 5.50, SD = 1.14) compared to when they are described as beneficial (M = 2.17, SD = 1.17; t(504) = 32.51, p < .001; d = 2.89).

Psychological Pain. When reading about a burdensome outgroup, participants experienced more pain (M = 2.65, SD = 2.85) than when reading about a beneficial outgroup (M = 2.02, SD = 2.61; F(1, 502) = 8.46, p = .004; d = 0.23). Further, when interacting with an outgroup, participants reported more pain (M = 3.12, SD = 2.90) than when they interacted when an ingroup (M = 1.56, SD = 2.33; F(1, 502) = 48.68, p < .001; d = 0.59). There was also a significant interaction between Outgroup Description and Evaluation Group (F(1, 502) = 35.12, p < .001). When participants read about a burdensome outgroup and then interacting with that outgroup, they experienced more psychological pain (M = 4.13, SD = 2.82) compared to reading about a burdensome outgroup and interacting with an ingroup (M = 1.23, SD = 2.02, p < .001), reading about a beneficial outgroup and interacting with an outgroup (M = 2.14, SD = 2.64, p < .001) or reading about a beneficial outgroup and interacting with an ingroup (M = 1.91, SD = 2.58, p < .001). Just like Study 1, results from the Pain Faces scale were not included in the analysis.

Exclusionary Assessment. This pattern of results continues when evaluating participant temptations to ostracize. The burdensome outgroup description (M = 3.36, SD = 1.69) caused greater temptation to exclude than a beneficial outgroup description (M = 3.07, SD = 1.41; F(1,502 = 6.09, p = .014; d = 0.19). Interacting with outgroups (M = 3.79, SD = 1.69) caused more temptation to exclude than interacting with ingroups (M = 2.64, SD = 1.18; F(1, 502) = 86.73, p < .001; d = 0.79). Further, there was a significant Outgroup Description × Evaluation

Group interaction ($F(1,502) = 37.02$, $p < .001$). When participants read about a burdensome outgroup and then interacted with that outgroup, they experienced more temptations to ostracize ($M = 4.33$, $SD = 1.70$) compared to reading about a burdensome outgroup and interacting with an ingroup ($M = 2.42$, $SD = 1.02$, $p < .001$), reading about a beneficial outgroup and interacting with an outgroup ($M = 3.27$, $SD = 1.51$, $p < .001$) or reading about a beneficial outgroup and interacting with an ingroup ($M = 2.87$, $SD = 1.29$, $p < .001$).

Pain as a motivator to ostracize. Participants directly linked their exclusionary behavior temptations to the pain they experienced. Participants attributed their behavior temptations to the pain they felt more when reading the burdensome outgroup descriptions ($M = 2.82$, $SD = 1.92$) compared to the beneficial description ($M = 2.32$, $SD = 1.68$; $F(1,502) = 12.53$, $p < .001$; $d = 0.27$). Further, participants connected pain and their temptations to a greater degree when they interacted with an outgroup ($M = 3.20$, $SD = 1.93$) compared to an ingroup ($M = 1.95$, $SD = 1.45$; $F(1,502) = 76.70$, $p < .001$; $d = 0.73$). The interaction between these variables was also significant ($F(1,502) = 48.67$, $p < .001$). When participants read about a burdensome outgroup and then interacted with that outgroup, they attributed their exclusion temptations to the pain they felt to a higher degree ($M = 3.96$, $SD = 1.86$) compared to reading about a burdensome outgroup and interacting with an ingroup ($M = 1.70$, $SD = 1.17$, $p < .001$), reading about a beneficial outgroup and interacting with an outgroup ($M = 2.45$, $SD = 1.70$, $p < .001$) or reading about a beneficial outgroup and interacting with an ingroup ($M = 2.20$, $SD = 1.66$, $p < .001$).

Negative Affect. Participants did not experienced more negative affect when reading about the burdensome description compared to the beneficial description ($F(1, 502) = 0.20$, $p = .656$). However, there were significant differences between Evaluation Groups, with participants experiencing more negative affect when interacting with an outgroup ($M = 2.67$, SD

= 0.81) compared to when interacting with an ingroup (M = 2.08, SD = .80; $F(1, 502) = 74.86$, $p < .001$; d =0.73). There was also a significant interaction between Outgroup Description and Evaluation Group ($F(1, 502) = 54.98$, $p < .001$). When participants read about a burdensome outgroup and then interacted with that outgroup, they experienced more negative affect (M = 2.94, SD = 0.70) compared to reading about a burdensome outgroup and interacting with an ingroup (M = 1.84, SD = 0.68, $p < .001$), reading about a beneficial outgroup and interacting with an outgroup (M = 2.40, SD = 0.82, $p < .001$) or reading about a beneficial outgroup and interacting with an ingroup (M = 2.32, SD = 0.85, $p < .001$).

Study 2 Discussion

In this study, I assigned participants to a minimal group and presented them with readings about an outgroup that were either beneficial or burdensome to the participants’ workplace. After reading about this group, participants imagined an interaction with either an ingroup or an outgroup and completed measures assessing psychological pain, temptations or ostracize members of the group, pain as a motivator to ostracize, and negative affect. Results show that reading about a burdensome outgroup caused more aversive reactions compared to reading about a beneficial outgroup (except negative affect). Further, interacting with an outgroup was more aversive compared to reading about an ingroup. Examining these factors together, participants experienced the most negative reactions when they read about a burdensome outgroup and then interacted with that outgroup; these participants experienced the most psychological pain, negative affect, and temptations to ostracize members of that group compared to the other conditions. This research seems to indicate that people are willing to ostracize a group that they deemed to be burdensome.

Compared to Study 1, Study 2 looks at the fundamental psychological processes driving this result: group membership, pain, and negative affect. Past research on the minimal group paradigm demonstrates it is an effective method of testing intergroup interactions because participants identify with the group they are assigned. This gave Study 2 an advantage over Study 1 as we know the group identities were meaningful to the participants, which may have affected how meaningful the subsequent interactions were. Further, this study shows that the intragroup processes around ostracism and perceptions of burdensome others also work at the intergroup level as well.

General Discussion

The current findings indicate when confronted with a burdensome outgroup, individuals responded with ostracism. Ostracism, because of the pain and need threat it causes (Williams, 2009; Williams et al., 2000) is a powerful tool to protect the group from burdensome group members at the intragroup level (Wesselmann et al., 2013). Many social interactions happen at the intergroup level, however, and group identity is important to individuals’ sense of self (Tajfel & Turner, 1979, 1986). Given intergroup interactions are also part of one’s daily experiences and integral to one’s sense of self, researchers need to determine if ostracism is used to protect oneself from burdensome social groups. My current research considered if perceptions of burden from an outgroup would cause participants to protect their group by ostracizing members of the burdensome outgroup.

I tested this question in Study 1 by presenting American participants with an outgroup negatively impacting society (i.e., a fictitious group – Abirians). Participants, following each interaction with Abirians, Americans (ingroup), and Galians (control condition outgroup), reported their psychological pain, temptations to ostracize, and how the pain they felt influenced

their temptations to ostracize. While participants successfully perceived the Abirians to be burdensome and ostracized burdensome, versus non-burdensome, Abirians at an increased level, participants did not feel increased psychological pain or ostracize because of the pain. I believe this to be due to a low-quality participant sample, indicated by nearly 40% of the participants being removed due to negative participant quality checks.

Study 2 investigated the research question using minimal groups. In this study, using similar methods to Study 1, I described an outgroup as negatively impacting the participant’s workplace. Participants perceived an outgroup worsening one’s workplace as burdensome and reported higher psychological pain, temptations to ostracize, negative affect, and directly attributed the ostracism to the pain they felt when interacting with this group compared when the outgroup was beneficial. Interacting with the outgroup also produced significantly worst effects, regardless of whether they were described as burdensome or beneficial. Further, when participants read about a burdensome outgroup and then interacted with that outgroup, they experienced more aversive reactions compared to all other conditions. Study 2 shows that perceptions of burden can be created at the intergroup level and that participants will ostracize outgroups they perceived as burdensome. Research on ostracizing other due to being a burden in an intragroup context may also apply to the intergroup context as well.

Implications

This research expands upon both ostracism and burden research, elevating both to the possibility of being investigated at the intergroup level. This includes manipulating perceptions of burden from an entire social group and displaying exclusionary behaviors towards members of a group. This research shows that groups can be deemed burdensome just as much as individuals can and provides a possible mechanism to investigate how participants respond to groups they

perceive to be burdensome. Further, this research shows that participants can express exclusionary behaviors to a group during an imagined interaction, in effect showing their willingness to ostracize an entire social group. To my knowledge, this is the first time ostracism and perceptions of burden has been investigated at the intergroup level in research.

This research contributes to our understand of group threats, particularly by adding burden as another dimension of threat. The prompts created in this study were heavily influenced by prompts used in threat research to manipulate perceptions of realistic threat from an outgroup (Makashvili, et al., 2018). By describing an outgroup as negatively impacting participants’ physical safety or financial well-being, threat research has successfully manipulated participants’ perception of threat from an outgroup. In the current research, I similarly presented the outgroup as negatively impacting the financial well-being of participants and this generated perception of burden. This begs the question: is burden just another form of threat? Or, alternatively, is threat just perceptions of burden? This research does not seem to indicate an answer either way, but because burdensome others negatively impact the ingroup in similar ways as a group that is deemed threatening, perceptions of burdensomeness may occur alongside perceptions of threat. This implication should be considered and possibly investigated in future research.

This research also contributes to our understanding of ingroup favoritism in response to threatening information to the ingroup. Past research, focused on threat specifically, found when presented with a threatening outgroup, participants responded with negative reactions to the outgroup *and* ingroup favoritism (Dietz-Uhler, 1999; Riek et al., 2006). My current research seems to indicate that participants respond similarly with ingroup favoritism when presented with a burdensome outgroup. Specifically, in Study 2, when participants read about a burdensome outgroup and then interacted with an ingroup, participants experienced less negative

affect (*p*s < .001) and approached significance in showing less exclusionary behaviors (*p*s < .051) compared to the other conditions. It seems that participants responded more positively to their ingroup after being faced with a burdensome outgroup (i.e., potentially demonstrating ingroup love). However, there were not significant differences on pain (*p*s < .141) or temptations to ostracize due to pain (*p*s < .071), so these results are not entirely conclusive, but are in the direction of past research.

More broadly, this research has implications for better understanding and evaluating the marginalization and oppression of groups. If a society determines a group to be burdensome and responds to that perception by ostracizing the burdensome group, the results would be devastating. Excluding a group from the benefits of society – public services such as healthcare; the ability to engage in the political process; healthy relationship and interactions with others in their area – marginalizes and oppresses that group (Marinucci & Riva, 2020). Ostracism then serves as a powerful social tool not just to punish individuals but entire communities. U.S. history has many events that may be examples of this, including the treatment of Black Americans in the Jim-Crow American South, Eastern Europeans in the 19th century, and Native Americans towards the nation’s founding. The Trail of Tears could easily be considered the ostracism of the Cherokee, Muscogee, Seminole, Chickasaw, and Choctaw nations, and the disastrous circumstances of that event detail how excluding a group from society can lead to the death of suffering of tens of thousands of people.

Limitations

The lack of significant results in Study 1 creates a few questions as to the generalizability of these results. In Study 1, American identity was used as an assumed ingroup for the participants and fabricated outgroups were described as burdensome. It is possible that the

participants’ attachment to their ingroup was not salient or participants did not create a meaningful interaction in the imagined scenario. The lack of results in Study 1 could cause concern that results of Study 2 may not be replicable outside of the minimal groups paradigm. However, the nature of minimal groups – a group attachment that was nonexistent and insignificant to participants before being involved in the study – shows that perception of burdensomeness to the ingroup do matter even at such a minimal level. It would make sense for similar reactions to occur if burden negatively affecting a real, meaningful identity.

This research is also limited by the measures used to understand the relationship between ostracism and burden, namely my use of a single measure for psychological pain. Because only one psychological pain measure was used, I may not have been a sensitive enough assessment of pain to detect smaller effects that may have occurred in Study 1. However, this is a valid measure that has been used successfully in past research (Riva et al., 2011).

Further, this research is limited because the effects of the outgroup (either burdensome or beneficial) were described to participants in writing, making the impact something participants imagined instead of having an immediate detrimental impact. It could be the immediate impact of the positive or negative effects of the outgroup may strengthen reactions to the outgroup in a greater fashion than what the current research found (as supported by Social Impact Theory; Latané & Wolf, 1981). However, past research successfully induced perceptions of a target being burdensome using imagined interactions (Okdie & Wirth, 2018), suggesting this limitation may not be overly problematic. However, it is impossible to say for sure the effects of a burdensome versus beneficial outgroup would be strengthened with greater immediacy of the effects and future research should address this point.

Future Directions

There are numerous possibilities created by this research. First, it would be valuable to retest Study 1 with a larger and more engaged sample in order to retest the burden-ostracism link. Generally, testing the burden-ostracism link at the intergroup level using real or quasi-real culture groups both expands our understanding of the burden-ostracism link as well as provides more meaning to this relationship in peoples’ lives. Minimal groups, while being critical to scientifically understanding group dynamics, do not carry strong meaning in day-to-day experiences. Retesting the ostracism-burden link with group identities that are meaningful outside research settings and relatable to people would provide a better understanding of the current research findings. If research can create a link between individuals’ real identity and manipulate perceptions of burden from a real culture group, I could have a real-life example of the results gathered from this research (such as the example which prompted this question in the Introduction) and increase the generalizability of these findings. These groups could be cultural or racial groups, political groups, national identities, or any ingroup-outgroup dynamic where conflicts and perceptions of burden are meaningful.

Future research should also test the burden-ostracism link using behavioral ostracism measures instead of self-report questionnaires. While these questionnaires provide evidence of participant’s behavior temptations and the relationship between burden and ostracism, having participants engage in ostracizing others would provide greater evidence of this relationship and strengthen our understanding of it. For example, if researchers were to place participants in a game of Cyberball with groups they perceive to be burdensome to test if participants threw the ball less to the burdensome group, we could test a behavioral test of this dynamic. However, we may find that ostracizing burdensome groups is simply a desire individuals express but are

unwilling to actively engage in. Testing this relationship with behavioral measures would help us better understand people’s reactions to burdensome others and the actions they would be willing to take to protect their group.

As mentioned in the introduction, the strength of an individual’s identity to their ingroup affects reactions to threats from outgroup (Cadinu & Cerchioni, 2001), and future research could take this into consideration when investigating perceptions of outgroup burden. The negative consequences of a burdensome outgroups in this study closely relate to the outcomes described in research on realistic threat. In realistic threat research, the strength of identity with an ingroup impacted participants’ reactions to the threat: stronger identifiers were more defensive of the ingroup than low identifiers. Given that burden may be interpreted as threat to the group, it seems plausible that this sort of relationship would exist with reactions to burden as well. A stronger attachment to the ingroup may cause participants to react more negatively to burdensome outgroups, perhaps increasing their psychological pain and exclusionary temptations, much like stronger ingroup attachments operates in threat research.

Conclusion

This research indicates, when confronted with a burdensome outgroup, individuals respond to that group by ostracizing them. While future research must look at this relationship outside of a minimal group context, it seems that, at a basic level, intergroup perception of burden can be created with very little effort. This research also seems to confirm events happening around us, as certain groups in American society can be portrayed as negatively impacting American workers and taxpayers (e.g., immigrants crossing the southern border), perhaps to promote exclusion of the group. If this is true, and individuals can be convinced to ostracize group members that are portrayed as burdensome, certain groups may be vulnerable to

being labeled out of society and the pain of ostracism can be leveraged against millions of people.

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